Claims

1. A housing having a liquid-tight electric bushing, in which an opening (2) provided in the housing (1) is closed with a closure surrounding the electric bushing, characterized in that the closure is a printed circuit board (3) embodied in multiple layers.

2. The housing as defined by claim 1, wherein the printed circuit board (3) is mounted on the housing (1) in such a way that a first layer (4), pointing toward the housing interior and forming a top side (O) of the printed circuit board (3), spans the opening (2).

3. The housing as defined by one of the foregoing claims, wherein at least one first contact element (10) is provided on the top side (O).

4. The housing as defined by one of the foregoing claims, wherein the first layer (4) is produced from an electrical insulation material.

5. The housing as defined by one of the foregoing claims, wherein the first contact element (10) is connected electrically to a second contact element (12) via at least one conductor track, guided in the interior of the printed circuit board (3) and forming a second layer (5).

6. The housing as defined by one of the foregoing claims, wherein for contacting the first contact element (10), a blind bore (8) reaching through the first layer (4) and extending as far as the second layer (5) is provided.

7. The housing as defined by one of the foregoing claims, wherein the second contact element (12) is provided on an underside (U) located opposite the top side (O).

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8. The housing as defined by one of the foregoing claims, wherein the second contact element (12) is extended to the outside at an edge of the printed circuit board (3).

9. The housing as defined by one of the foregoing claims, wherein the printed circuit board (3) is flexible.

10. The housing as defined by one of the foregoing claims, wherein the printed circuit board (3) has a plurality of second layers (5), located one above the other, of conductor tracks.

11. The housing as defined by one of the foregoing claims, wherein the first contact element (10) and the second contact element (12) are connected via a plurality of conductor tracks, located one above the other and connected to one another electrically conductively.

12. The housing as defined by one of the foregoing claims, wherein a seal (16) is provided between the printed circuit board (3) and the housing (1).

13. The housing as defined by one of the foregoing claims, wherein a pressure plate (14) contacting the underside (U) of the printed circuit board (3) is provided for pressing the printed circuit board (3) against the seal (16).

14. The housing as defined by one of the foregoing claims, wherein in the housing (1), an X-ray tube is received.

15. The use of a printed circuit board (3) as a closure for liquid-tight closing of a an opening (2) provided in a housing (1) and as an electric bushing.

16. The use as defined by claim 15, wherein the printed circuit board (3) is

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mounted on the housing (1) in such a way that a first layer (4), pointing toward the housing interior and forming a top side (O) of the printed circuit board (3), spans the opening (2).

17. The use as defined by claim 15 or 16, wherein at least one first contact element (10) is provided on the top side (O).

18. The use as defined by one of claims 15 through 17, wherein the first layer (4) is produced from an electrical insulation material.

19. The use as defined by one of claims 15 through 18, wherein the first contact element (10) is connected electrically to a second contact element (12) via at least one conductor track, guided in the interior of the printed circuit board (3) and forming a second layer (5).

20. The use as defined by one of claims 15 through 19, wherein for contacting the first contact element (10), a blind bore (8) reaching through the first layer (4) and extending as far as the second layer (5) is provided.

21. The use as defined by one of claims 15 through 20, wherein the second contact element (12) is provided on an underside (U) located opposite the top side (O).

22. The use as defined by one of claims 15 through 21, wherein the second contact element (12) is extended to the outside at an edge of the printed circuit board (3).

23. The use as defined by one of claims 15 through 22, wherein the printed circuit board (3) is flexible.

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24. The use as defined by one of claims 15 through 23, wherein the printed circuit board (3) has a plurality of second layers (5), located one above the other, of conductor tracks.

25. The use as defined by one of claims 15 through 24, wherein the first contact element (10) and the second contact element (12) are connected via a plurality of conductor tracks, located one above the other and connected to one another electrically conductively.

26. The use as defined by one of claims 15 through 25, wherein a seal (16) is provided between the printed circuit board (3) and the housing (1).

27. The use as defined by one of claims 15 through 26, wherein a pressure plate (14) contacting the underside (U) of the printed circuit board (3) is provided for pressing the printed circuit board (3) against the seal (16).

28. The use as defined by one of claims 15 through 27, wherein in the housing (1), an X-ray tube is received.

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